Cotton/Soybean Insect Newsletter

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Pest Patrol Hotline

A summary of current problems with insects is available this season via a toll-free hotline. Simply call the free number **(877) 285-8525** and select the messages you would like to hear. I will update the short message weekly for at least as long as the newsletter runs. The hotline is sponsored by Syngenta.

Cotton Situation

As of 26 July 2009, the USDA NASS South Carolina Statistical Office had our progress at 94% squared, ahead of where we were last year at 87% and ahead of the 5-yr average of 88%. At least 38% of the crop has set bolls, compared with about 41% this time last year and 39% for the 5-yr average. Conditions were described as 0% excellent, 49% good, 49% fair, 1% poor, and 1% very poor for the crop. Recent rainfall has helped, and the reports should be better next week. These are observed/perceived state-wide averages.

Soybean Situation

As of 26 July 2009, the USDA NASS South Carolina Statistical Office had our progress at about 30% of the crop reported as blooming, behind where we were last year at 36% and the 5-yr average of 42%. About 7% of the crop is setting pods, behind where we were last year at 8% and for the 5-yr average of 14%. Conditions were described as 0% excellent, 47% good, 48% fair, 4% poor, and 1% very poor. Again, recent rains will certainly help the crop. These are observed/perceived state-wide averages.

News from Above the Lakes

No news to report this week. Please email or call me with your observations and comments by Wednesday!

News from Below the Lakes

Tommy Walker, county agent covering Allendale, Hampton, and Jasper Counties, reported this week that he has finally seen aphids "crash" in cotton due to the fungus. He also reported that he is seeing a good mix of cotton fields with issues with one or more of the following: stink bugs, bollworms, and fall armyworm. Jonathan Croft, county agent covering Berkeley and Dorchester Counties, reported that "some soybeans are getting sprayed down my way this week. They are some group 5 and 6 beans in the R4-R5 growth stages. The group 6 beans I looked at this week needed a treatment for stinkbugs; worm counts were not high enough for treatment on their own. Worms were a mix of green cloverworm and loopers."

2009 SC Cotton Growers' Guide, Pest Management Handbook, and Insect Control Guides

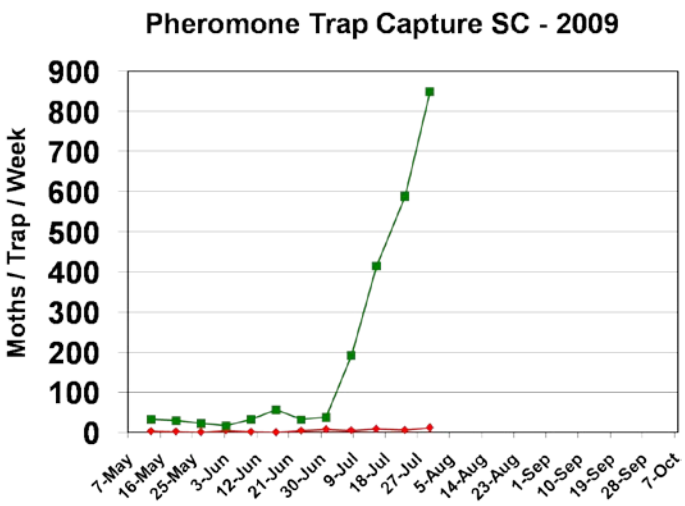
The 2009 South Carolina Cotton Growers' Guide is available from your local county office in paper copy or online at: http://www.clemson.edu/psapublishing/pages/AGRO/EC589.PDF.

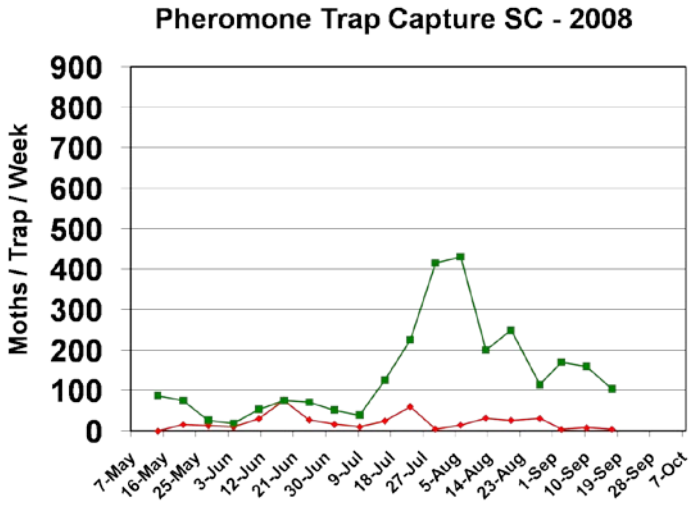
The 2009 Pest Management Handbook is available in limited quantities. Contact your local county office for availability. A $10 fee might be charged for the handbook. You can also download the handbook from: http://www.clemson.edu/extension/rowcrops/pest/index.html

Clemson University Publications IC97 (Cotton Insect Management) and SL1 (Soybean Insect Management) are available free from your local county office in paper copy or online at:
http://www.clemson.edu/psapublishing/pages/ENTOM/IC97.PDF and
http://www.clemson.edu/psapublishing/pages/AGRO/SL1.PDF

Bollworm & Tobacco Budworm

Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season and last season are presented. The scales on the charts are the same to illustrate where we are compared with last year. We trapped almost 8,500 BW moths in 10 traps this past week to give us about 850/trap/wk. We averaged about 12 TBW moths per trap this past week. Captures of BW moths have dramatically increased again. These numbers are twice as high as the highest weekly capture for all of last year. The Bts are very good, but you should check for bollworm escapes and use recommended thresholds, particularly with this moth activity in our local area. These data along with reports from other states indicate that bollworm is and will be a primary pest for at least several more weeks in cotton. Continue to monitor for bollworm in soybeans also.





Stink Bugs, Bollworm, and Armyworm in Cotton

This is the mix of insects to be concerned with right now in cotton. Most of the cotton crop should still be in the window (wk 3-5 of bloom) for aggressive control (10%) of stink bugs, so applications of pyrethroid insecticides should provide good control of bollworm and stink bugs and provide some suppression of fall

armyworm (FAW). Novaluron, an insect growth regulator (trade name Diamond), at 9 oz/acre (or 6 oz/acre when tank-mixed with a pyrethroid) is a good product for FAW. There are also reports of numerous beet armyworms (BAW) on pigweed in fields, and I have observed BAW on pigweed in this area. These insects are primarily foliage feeders, but they can feed on squares and blooms and, after attaining some age/size on weeds, can move to first- and second-generation Bt cotton and survive. So be on the lookout for BAW also. Normal thresholds (counting "hits") will not work for BAW moving off of pigweed onto cotton. Use a 10% square-damage threshold, or treat when noticeable damage to squares and blooms is present along with BAW in the field. Insecticide recommendations for armyworms are listed below:

ARMYWORMS (BEET AND FALL ARMYWORM)

Product	Product/acre	Lb ai/acre	Acre/gal	REI	PHI	Comments
emamectin benzoate **(R)**		0.0075-0.015		48 hr	21 d	Suppression
Denim 0.16 EC (BAW)	6-8 oz		16-21.3			of spider
Denim 0.16 EC (FAW)	8-12 oz		10.7-16			mites
indoxacarb		0.09-0.11		12 hr	14 d	
Steward 1.25 EC or SC	9.2-11.3 oz		11.5-14			
methoxyfenozide		0.06-0.16		4 hr	14 d	Higher rates
Intrepid 2 F	4-10 oz		12.8-32			for FAW
novaluron		0.039-0.078		12 hr	30 d	
Diamond 0.83 EC	6-12 oz		10.7-21.3			
spinosad		0.067-0.085		4 hr	28 d	
Tracer 4 SC	2.14-2.9 oz		45-60			
thiodicarb **(R)**		0.6-0.9		48 hr	28 d	Acts as
Larvin 3.2 F (FAW)	1.5-2.25 pt		3.6-5.3			ovicide also
methomyl **(R)**		0.45-0.675		3 d	15 d	May redden
Lannate 2.4 LV (FAW)	1.5-2.25 pt		3.6-5.3			leaves

Control of fall armyworms (FAW) may be justified when 10 or more larvae are found per 100 plants. Check blooms for the presence of FAW and look for feeding symptoms on boll bracts in the lower canopy. For beet armyworms (BAW) consider applying an insecticide when there are five or more "hits" per 100 feet of row, with larvae present. A hit is defined as a plant with one or more leaves damaged from the feeding of beet armyworms emerging from one or more egg masses. The first visible sign will be a brown spot about the size of a quarter on the upper surface of a leaf, produced by an aggregate of small worms (hatchlings from a single egg mass) feeding on the underside. As worms increase in size, the upper leaf surface will become net-veined, and larger worms will eventually feed completely through the leaf. Begin scouting for beet armyworms upon observing the first hit in a field. Randomly select five locations in a field and examine all plants on 100 feet of row at each location – determine the average number of hits per 100 feet of row. Cotton with a single *Bt* toxin (i.e. Bollgard) will only provide minimal control of the two armyworm species, but varieties containing two endotoxins will provide good control. Pyrethroids and other ovicides applied for bollworm control will also provide some degree of control of eggs and newly hatched armyworms; however, after the worms have fed on cotton plants, these materials will be less effective. Best control is achieved when applications of insecticide are timed to coincide with egg hatch and emerging larvae.

Fall armyworm (notice parasitoid eggs)

Need More Information?

Log on to the following webpage to view important recommendations for cotton and soybean insect management, data, and historical cotton insect newsletters:

http://www.clemson.edu/extension/rowcrops/

Sincerely,

Jeremy K. Greene, Ph.D.
Associate Professor – Entomologist

Visit our website at:
http://www.clemson.edu